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# BLM Onshore Oil and Gas Performance Review of the NEPA/Planning Process

# Phase 1 Final Report

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U.S. Bureau of Land
BLM ONSHORE OIL
AND GAS
PERFORMANCE REVIEW
OF THE

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# EXECUTIVE SUMMARY

## Background

In March 1994 Bureau of Land Management (BLM) Acting Director Mike Dombeck authorized a review of the Bureau's National Environmental Policy Act (NEPA)/land management planning process for onshore oil and gas leasing and development. The first phase of the evaluation, called the *Bureau Performance Review* (BPR), sought input from a variety of interested groups and individuals, including federal agency personnel, environmental groups and industry. This report contains Phase 1 issues, the team's recommendations to BLM management, and five action plans for Phase 2 implementation.

The ten member team included representatives of the BLM, National Park Service, Office of the Secretary and Solicitor's Office in the Department of the Interior, U.S. Forest Service; and Department of Energy (Appendix A). Phase 1 work was initiated in August 1994 and completed in January 1995. The goal of the Phase 1 review was to: 1) determine what customers and stakeholders perceive as the pertinent issues, and 2) recommend actions the Bureau could take to improve program effectiveness and efficiency.

Public, industry and interest group comments obtained during BPR scoping were fully considered. These comments were supplemented by additional public input obtained midway through the project. An interim status report and issue summary were widely distributed and team representatives participated in four outreach meetings between October and early December 1994.

## Issues and Recommendations

The Phase 1 review yielded issues in five major categories relative to the oil and gas NEPA/Planning process:

Agency Approach to Oil and Gas Management;
Land Management Planning Process;
Ecosystem Management/Interagency Coordination;
Environmental Requirements; and
Training, Skill Mix and Staffing.

Some of the fundamental issues addressed by the recommendations include:

- The importance and need for a comprehensive, current, interagency resource database to guide resource management decisions on an ecosystem basis.

- The value of collaborative, goal-oriented planning that focuses on end-result desired future conditions (e.g., socio-economic, ecological, etc.), rather than prescriptive decisions.
- Recognition of the importance of early involvement of stakeholders in decision-making and the value of alternative approaches to conflict resolution.
- The need to evaluate the effectiveness of environmental requirements, deal with changing conditions in the field, and provide a feedback loop to future decision-making.
- The importance of evaluating the current status of leasing decisions in relation to other environmental values and concerns. Such an evaluation is necessary to reach informed conclusions as to the adequacy of current practices and policies in protecting particularly sensitive areas.
- The importance of interagency collaboration and technology transfer.

To provide guidance and priority to the Phase 2 implementation project, the individual recommendations have been grouped into five action plans. The success of the BPR depends on implementation of the action plans. Taken in total, the plans have significant potential to improve the effectiveness and efficiency of the program in the short and long term.

Implementation of the recommended action plans involves a significant commitment of resources and, in some cases, significant changes in the current way the Bureau does business. This must be balanced, however, by the realization that many of the fundamental issues addressed in this report have been discussed and debated in a variety of forums for over twenty years. Positive resolution of several of the fundamental issues would lead to improved effectiveness of the Bureau oil and gas program and allow the Bureau to continue to provide for responsible development while safeguarding the health of the land.

## INTRODUCTION

The Bureau of Land Management (BLM) Onshore Oil and Gas Bureau Performance Review (BPR) was chartered in March 1994. This review was initiated in the spirit of standards established in Vice President Al Gore's National Performance Review. The purpose of the review, as stated in the charter, was to ensure that the oil and gas program: 1) meets the needs of its customers; 2) is responsive to environmental and fiscal concerns; and 3) continues to encourage efficient oil and gas production and wise resource recovery from the federal mineral estate.

The initial step in the review consisted of scoping to obtain both internal and external customer input. Four teams and three laboratories were established to address issues and comments in seven areas. The laboratories were to address Lease Sale Efficiencies, Native American issues, and Outreach/Interagency Coordination. The four teams were to deal with Regulatory Review; Incentives; Bonding/Unfunded Liability; and NEPA/land management planning. The NEPA/planning project was divided into two phases, of which this is Phase 1.

## BUREAU PERFORMANCE REVIEW NEPA/PLANNING TEAM

Phase 1 was established to review all comments received during the BPR scoping period and provide recommendations and priorities to Bureau management. In essence, the charge to this team was to determine: "What are people telling us regarding NEPA, land management planning and the oil and gas program?" and "What actions should BLM take to improve how it does business?"

An interagency team was formed in August 1994 to carry out the task. The team consisted of ten members as shown in Appendix A. Team representation included employees from the Department of the Interior (DOI), BLM, National Park Service, Office of the Secretary, and Solicitor's Office; Department of Agriculture, U.S. Forest Service; and Department of Energy. A charter was prepared and approved and the team began work by reviewing hundreds of scoping comments. Based on these comments, five major issue areas were identified: Agency Approach to Oil and Gas Management; Land Management Planning Process; Ecosystem Management/Interagency Coordination; Environmental Requirements; and Training, Skill Mix and Staffing.

The Phase 1 review was heavily "comment driven." The team elected to provide an additional opportunity for specific public comment on the five issue areas to afford every opportunity for input and to "ground truth" the team's initial analysis of scoping input. A Status Report and Issue Summary (commonly referred to as "Bulletin 11") was prepared and distributed in early November 1994.

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## BUREAU PERFORMANCE REVIEW NEPA/PLANNING TEAM

Phase I was established to review all comments received during the BPR scoping period and provide recommendations and priorities to Bureau management. In essence, the charge to this team was to determine: "What are people telling us regarding NEPA, land management planning and the oil and gas program?" and "What actions should BLM take to improve how it does business?"

An interagency team was formed in August 1994 to carry out the task. The team consisted of ten members as shown in Appendix A. Team representation included employees from the Department of the Interior (DOI), BLM, National Park Service, Office of the Secretary, and Solicitor's Office; Department of Agriculture, U.S. Forest Service; and Department of Energy. A charter was prepared and approved and the team began work by reviewing hundreds of scoping comments. Based on these comments, five major issue areas were identified: Agency Approach to Oil and Gas Management; Land Management Planning Process; Ecosystem Management/Interagency Coordination; Environmental Requirements; and Training, Skill Mix and Staffing.

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Team members participated in four outreach meetings hosted by the Rocky Mountain Oil and Gas Association and Independent Petroleum Association of Mountain States (RMOGA and IPAMS, respectively), the Montana Wilderness Association (MWA), the Wyoming Outdoor Council in cooperation with the National Wildlife Federation, and the Interstate Oil and Gas Compact Commission (IOGCC). These meetings were held between late October and early December 1994. Input from these meetings and from the mailings of Bulletin 11 were added to the BPR mailing list, and resulted in additional specific written comments.

This Phase 1 report provides the recommendations for possible actions during Phase 2 of the BPR NEPA/planning project. The value of the overall NEPA/planning portion of the BPR depends on diligent follow-up and implementation during Phase 2 and beyond.

## REPORT STRUCTURE

The body of this report is divided into two basic sections. The first section describes the five major issue areas as determined from a review of the comments and the collective experience of the team. Each issue is then followed by a set of recommendations for consideration by BLM management. Any given comment may be mentioned in more than one section. This recognizes the cross-cutting nature of some comments and addresses each from appropriate perspectives in the recommendations. Cross references between recommendations are provided where they relate to more than one of the major issue areas.

The second section presents related or inter-dependent recommendations which are grouped together into a series of "Action Plans." This section of the report provides a convenient means to group most of the major recommendations into packages to guide implementation action in Phase 2.

# SECTION ONE: ISSUES AND RECOMMENDATIONS

## ISSUE I: AGENCY APPROACH TO OIL AND GAS MANAGEMENT

Some commenters suggested that BLM has an organizational preference for full development and maximum recovery of oil and gas resources at the expense of other resources such as wildlife, water, and archaeological sites. Others expressed the concern that the only areas available for oil and gas leasing are those which remain after all other use conflicts are resolved. The comments generally fall into the following subject areas:

Organizational Preference Towards Extraction of Oil and Gas Resources:

- The term "customer" is used to refer only to the commodity extraction industry, and non-consumptive users are not included in management activities and decisions.[1]

- Wise and efficient oil and gas production should be BLM's goal, not regulation. Furthermore, BLM should cooperate with industry to maximize recovery, minimize risk, and test new technologies.

- The no-leasing alternative and cumulative impacts are not seriously considered.

- Resource values, other than threatened and endangered (T&E) species and cultural resources, do not receive equal consideration with oil and gas. The tenor of many of these comments suggests that the BLM favors oil and gas development. (See also Issue III.)

- The NEPA process is inappropriately used to justify foregone leasing decisions. It was also suggested that development is facilitated through the issuance of waivers, exceptions and modifications which are approved without public involvement. (See also Issues II and IV.) Others were concerned that lease stipulations are used to preclude development rather than making a decision not to lease. (See also Issues II and IV.)

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[1] During the review, some people voiced concern over the use of the terms "customer" and customer service." According to them, the terms relate only to commodity interests and are, therefore, biased in favor of industry. The team consistently interpreted these terms in their broadest sense to include the full range of public interests, including environmental groups, industry and agency personnel.

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Inconsistency Between BLM and Forest Service Approaches Towards Leasing:

- There was a general view that the Forest Service considers areas unavailable for leasing or development until they are analyzed in a land use plan or NEPA document, while BLM areas are considered open to leasing unless specifically withdrawn.

Human Resources and Management Oversight:

- Inadequate resources (personnel, training, and operational funds) are devoted to monitoring and enforcement of environmental requirements such as lease stipulations and conditions of approval (COAs.)
- There is inadequate managerial consideration of the findings and recommendations made by field personnel. (See also Issue V.)

## RECOMMENDATIONS

Based on the foregoing comments, the team recommends that management take the following actions:

A. Continue to emphasize BLM's "Blueprint for the Future," particularly the portions on maintaining healthy ecosystems, serving current and future publics, and promoting collaborative leadership.

B. Utilize alternative dispute resolution mechanisms, consistent with federal law, to bring conflicting points of view to the table to guide BLM's oil and gas leasing policy. The involvement of interested parties could promote the resolution of multiple use issues. This approach is outlined in the DOE's "Domestic Natural Gas and Oil Initiative" and the Department of Labor's "Negotiated Rulemaking Handbook." (See also Issues III and IV.)

C. BLM managers should be given the flexibility to consider lease deferrals, no-lease decisions, and withdrawals consistent with ecological conditions and the "Blueprint" philosophy. The headquarters office should clarify the relationship between planning decisions under section 204 of the Federal Land Policy and Management Act (FLPMA) and the Mineral Leasing Act, possibly seeking either guidance or an opinion from the Solicitor's Office. If it is clearly determined that areas must be considered leasable unless formally withdrawn, BLM should pursue alternatives to provide field managers with the flexibility to defer leasing or not lease in specific areas based on planning decisions.

D. Establish a quality control program with feedback to ensure that decisions are supported by objective NEPA analyses.

E. Establish a screening process to focus BLM's limited resources on areas with a moderate-to-high likelihood of leasing and development. (See also Issue V.)

F. Conduct the following specific analyses on BLM and Forest Service lands as part of Phase 2 to determine the magnitude of environmental controversy and its relationship to on-the-ground oil and gas potential and sensitive values. The results of these analyses would help determine the magnitude of environmental conflict.

1. Identify all areas that have controversial oil and gas leasing and development activities;

2. Determine what proportion of lease tracts offered and Applications for a Permit to Drill (APDs) processed during the past ten years provoked environmental controversies;

3. Determine what proportion of the available public land base contains areas of high environmental concern;

4. Compare acreage of tracts successfully offered without controversy with acreage and tracts that provoked appeals and/or litigation; and

5. Compare number of APDs processed and issued with the number of APDs subject to administrative appeals or litigation.

## ISSUE II: LAND MANAGEMENT PLANNING PROCESS

The role of planning in oil and gas leasing and development concerned a significant number of commenters. These concerns range from adequacy of Resource Management Plans (RMPs), NEPA documents and Forest Plans, to the follow-up on stipulations and conditions of approval. Many people argued that RMPs, Forest Plans, and other NEPA documents were inadequate or did not tie sufficiently to lease stipulations and COAs. The comments can be summarized as follows:

Planning Adequacy:

- There was a wide range of opinion as to when leasing decisions are made and what level of documentation this decision is based on. For instance, should specific environmental analyses occur prior to leasing or prior to development? Also, there is confusion regarding whether an environmental assessment (EA) is sufficient to allow development or an environmental impact statement (EIS) is required.

- Other commenters argued that NEPA analyses take too long, are too expensive and/or inadequate.
- RMPs provide insufficient information upon which to make management decisions.
- On-the-ground monitoring information is not being used in plan modifications.
- The quality of cumulative impact assessments should be improved by providing better guidance and training. (See also Issue V.)

Stipulations and COAs:

- There should be better justification for all stipulations.
- There are too many stipulations.
- Stipulations for drilling and surface use should be announced before a lease sale.
- Stipulations and COAs are not sufficiently connected to RMPs. It was also argued that in order for BLM to accommodate environmental concerns, parcels are being withheld from leasing rather than protected by applying stipulations.

Public Input:

- The adequacy of public input in the waiver process, APDs, and geophysical exploration surveys was questioned. (See also Issue IV.)

Resource Data:

- Leasing decisions are not supported by adequate environmental baseline and monitoring data. In other situations, there may be a failure to update or consider all available environmental data. (See also Issue I.)
- There is redundancy in data collection.
- Up-to-date data needs to be integrated into the planning process.
- "Good science" should be used when leasing decisions are made.

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## RECOMMENDATIONS

A. Instruct all field offices to use the "Guidelines for Assessing and Documenting Cumulative Impacts" (BLM April 1994), and inform our customers of the existence of this document.

B. Consistent with FLPMA, planning documents should be goal-oriented to provide for sustainable development and, whenever possible, improve the health of the ecosystem. This would increase the flexibility of the planning process and support site-specific analysis wherever necessary. This approach also enables BLM and the Forest Service to focus limited resources on areas of moderate-to-high oil and gas potential.

C. Re-emphasize that the rationale and justification needs to be given for every stipulation attached to a lease. (See also Issue IV.)

D. Examine the adequacy of the public input process in the waiving of stipulations, and/or whether criteria for possible waivers were provided in the respective RMPs. (See also Issue IV.)

E. Re-emphasize the importance of complete, multi-disciplinary, accurate and up-to-date databases to support the preparation, implementation and monitoring of plans and NEPA documents. Adequate data is the basis of any good science project; the quality of a RMP is directly related to the quality of the data used. The BLM Corporate Board, the Executive Leadership Team and resource specialists in the field should all assure the adequacy of the databases used. (See also Issues III and IV.)

F. Establish a multi-disciplinary BLM-USFS team to consider the following issues as they relate to oil and gas resources:

1. Adequacy of planning and NEPA documents;
2. Length of time to complete plans or NEPA documents;
3. Level of environmental documentation (EAs versus EISs); and
4. Efficiency and cost.

As an alternative, a specific Phase 2 NEPA/planning team could be assigned this task. This effort should not duplicate analysis already performed under BLM's "Reengineering for Quality" and planning reform project, but rather supplement and build on it.

RECOMMENDATIONS

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As an alternative, a specific Phase 2 NEPA-planning team could be assigned this task. This effort should not duplicate analysis already performed under BLM's "Reengineering for Quality" and planning reform project, but rather supplement and build on it.

G. Develop generic Model Plans, based on ecosystems, to help streamline the planning process and make plans more easily reviewed and understood by the public.

H. Adopt a comprehensive policy for the management of federal lands that evaluates use authorizations holistically in the context of their ecological setting. This policy would consider the short and long-term impacts of all activities, recognizing construction, reclamation, operation and maintenance activities over the life of the project. Such a policy would better enable decision makers to realistically consider project proposals in the context of ecosystems. Surface disturbance and other impacts due to oil and gas activities include all ancillary facilities but should also recognize reclamation activities rather than merely the number of wells that could be drilled over the life of a plan. Adopting this policy would result in more realistic cumulative impact assessments and reasonably foreseeable development (RFD) scenarios.

I. Establish guidelines for the preparation and documentation of RFD scenarios. The guidelines should include the policy described in II.H. above and replace H-1624-1 (Supplemental Program Guidance for Fluid Minerals).

J. Emphasize monitoring as a critical part of the plan implementation process. The information gained through monitoring should be used to test the effectiveness of the plan and would facilitate a dynamic planning process, including the RFD scenarios. (See also Issue IV.)

K. Develop and implement dispute resolution mechanisms, consistent with federal law, through the formation of collaborative work teams, advisory committees and stakeholder workshops. (See also Issue I, Recommendation B.)

## ISSUE III: ECOSYSTEM MANAGEMENT/INTERAGENCY COORDINATION

The BLM's commitment to ecosystem management requires that the agency consider the interaction of oil and gas operations with biological, physical, and socioeconomic resources beyond its traditional administrative boundaries.

Land management activities' impacts on affected stakeholders and resources, including federal, military, state and local governments, Native American tribes, and private landowners, must be weighed and considered in the NEPA decision-making process. Many commenters called on BLM and the Forest Service to develop collaborative management strategies to include all involved land managers and landowners in the NEPA and planning process. Their concerns include the following:

G. Develop generic Model Plans, based on ecosystems, to help streamline the planning process and make plans more easily reviewed and understood by the public.

H. Adopt a comprehensive policy for the management of federal lands that evaluates use authorizations holistically in the context of their ecological setting. This policy would consider the short and long-term impacts of all activities, recognizing construction, reclamation, operation and maintenance activities over the life of the project. Such a policy would better enable decision makers to realistically consider project proposals in the context of ecosystems. Surface disturbance and other impacts due to oil and gas activities include all ancillary facilities but should also recognize reclamation activities rather than merely the number of wells that could be drilled over the life of a plan. Adopting this policy would result in more realistic cumulative impact assessments and reasonably foreseeable development (RFD) scenarios.

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Ecosystem Management:

- The concept of ecosystem-based management is unclear. In particular, how will existing oil and gas planning and leasing processes be integrated into the ecosystem management approach?

- Commenters representing a wide variety of perspectives agreed that land management decisions must be based on valid scientific data. It is essential that land management decisions are based on an up-to-date, sound, scientific database of the biotic and abiotic components of the ecosystem. (See also Issue II.)

- Environmental analyses tend to be piecemeal and are inadequate. Some commenters suggested that BLM undertake regional cumulative impact analyses. Conversely, other commenters stated that ecosystem studies are unnecessary and redundant to existing NEPA and planning analyses, or that inclusion of ecosystem management in the BPR was inappropriate, as oil and gas development is only one component of ecosystem-based land management.

- Analysis based on ecosystems requires that impacts resulting from oil and gas operations on and/or from private or split estate lands should be considered when federal land management decisions are made. It was suggested that a new policy for NEPA will be required on split estate lands.

- Ecosystem management is changing the way lands are evaluated for leasing, perhaps to the detriment of oil and gas resources. The perception exists that the only lands available for leasing are those remaining after all other use conflicts are resolved.

- Incorporating a dynamic "net effect" approach into ecosystem management would set thresholds based on sustainable development. This process would still allow industry access, and serve as an incentive for minimal surface disturbance and the rapid and effective restoration of disturbed lands. (See also Issue II.)

- Less conspicuous resources, such as geologic, soils, hydrologic, and air quality, may be overlooked in traditional NEPA analyses, but would gain from an ecosystem management approach. (See also Issue I.)

Interagency and Public Coordination:

- Effective coordination early in the plan preparation process among all stakeholders, particularly adjacent land managing agencies and owners, was

a significant concern. Cooperative efforts must work both ways and consider all stakeholders' needs. Within the framework of interagency coordination, it was recommended that the agencies streamline or eliminate redundant permitting processes as well as simplify and consolidate regulations where possible.

## RECOMMENDATIONS

A. Develop a computerized ecosystem database accessible by all affected land management agencies. The establishment of such a database, which includes all available information on both federal and non-federal lands, is the single most critical element necessary for successful ecosystem-based management as well as sound leasing and development decisions. The availability of a common database would also facilitate the development of regional cumulative impact assessments. To facilitate long-range resource planning, BLM should request that industry provide the surface managing agency with its near term and long term plans. Freedom of Information Act issues should also be considered. (See also Issue II.)

B. Direct the field offices to review existing ecosystem management guidance, including guidance on less prominent resources such as geological, soil, hydrological, air quality and socioeconomic resources. Each agency should review existing policy for the presence of these guidelines. If the guidance covers these resources, it should be re-emphasized to the field. If not, then new or supplemental guidelines should be developed. The Bureau should ensure that this guidance includes incorporating available information on non-federal lands.

C. Improve coordination with stakeholders by:

   1. Using new or existing Memoranda of Understanding (MOUs) to facilitate collaborative efforts; and

   2. Consolidating or co-locating field offices in areas where different agencies have similar management issues. (See also Section IV.)

D. Pursue a consistent intra- and inter-agency approach to ecosystem management, particularly as it relates to the planning regulations. Under the ecosystem management approach, it is imperative that all affected stakeholders, including the BLM, Forest Service, other federal and state agencies, and the public have a common definition of terms and consistent process.

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E. Coordinate with the numerous regional and national initiatives currently underway, including:

1. Other BPR teams;

2. DOE's Domestic Natural Gas and Oil Initiative;

3. IOGCC Public Lands Project;

4. Council on Environmental Quality (CEQ) Cumulative Effects study; and

5. U.S. Geological Survey National Assessment.

Emphasis should be on eliminating redundancy and inconsistency and establishing effective technology transfer.

F. Design and implement a cooperative demonstration ecosystem project incorporating the recommendations of the BPR. The Southwest Wyoming Resource Evaluation is an excellent candidate for such a project.

## ISSUE IV: ENVIRONMENTAL REQUIREMENTS

The application, enforcement and monitoring of environmental requirements in the form of standard lease terms, stipulations and lease notices attached to oil and gas leases, and COAs attached to applications for a permit to drill (APDs) were cited as major concerns to several commenters. These concerns can be summarized as follows:

Effectiveness of Environmental Requirements:

- Monitoring the effectiveness of oil and gas environmental requirements is not being carried out on-the-ground. This includes estimating costs, justification for, and the suitability and effectiveness of stipulations. Also, cost/benefit and risk analyses need to be conducted on all environmental requirements placed on oil and gas activities. A review of seasonal (timing) stipulations versus other methods of reducing impacts should also be conducted.

- Adequate environmental analysis and public participation are not being conducted before stipulations are waived, excepted or modified. It was also stated that excessive environmental requirements were frequently needed to justify a waiver, exception or modification. (See also Issues I and II.)

- More public participation should take place during the staking process and during on-site examinations.

- Requirements developed during planning are not being carried forward into conditions of approval on APDs. In addition, it takes too long to process APDs.

- Certain environmental and operational elements are not being considered in NEPA documents, nor are they subjected to an interdisciplinary review. Examples of these elements include sub-surface issues (groundwater protection), plugging and abandonment, and venting and flaring.

- No Surface Occupancy (NSO) stipulations and ESA (Endangered Species Act) requirements adversely affect exploration, development, and production. There is an excessive use of "no lease" and/or NSOs to create buffer zones around parks, wilderness areas, and other sensitive areas.

- Eliminate redundant survey/inventory requirements, specifically those regarding archaeological resources.

- Environmental requirements developed during the planning process, such as timing stipulations, are applied only to the development stage and should also apply to operational aspects of a project.

## RECOMMENDATIONS

A. Conduct a joint BLM and Forest Service study of the types of stipulations and COAs they use in various situations. This study should assess the real versus apparent purpose, and the effectiveness of stipulations and other environmental requirements. This study could utilize third party monitoring. Funding possibilities for third party monitoring include: Industry, environmental groups, interagency, or a combination thereof. (See also Issue II.)

B. Increase and improve the quantity and quality of monitoring of post-leasing actions. This would help determine the effectiveness of mitigation measures that are currently being applied. One key element of monitoring would be to ensure feedback from monitoring into the development and application of future mitigation. (See also Issue II.) Increase the number of monitoring personnel, improve training in monitoring, and increase management support of staff recommendations made as a result of monitoring. (See also II and V.)

C. Establish test areas, with close public oversight (especially in sensitive areas), to evaluate the proper use of mitigation measures during exploration and the level of

impact on the environment. Such test areas could also be used to evaluate new technology for mitigation and waste reduction and prevention.

D. Public Participation

1. Apply current requirements that call for public participation in the application for evaluating waivers, exceptions, and modification to stipulations.

2. Investigate the practicability of an open process for public participation in on-the-ground actions (e.g., field examinations for APDs.) This would allow for an opportunity for public input into on-the-ground layout of projects. If practical, develop implementation guidance for this process.

E. Develop guidance to expand analysis to include elements not previously considered, including:

1. Subsurface: plugging and abandonment;

2. Flaring and venting;

3. Downhole (during drilling); and

4. Economics of environmental and operational elements.

F. Assess how often "No Lease" or NSO requirements are used to create buffer zones around parks, wilderness areas, and other sensitive areas. Use that assessment to determine if a policy is needed to address or change current management direction.

G. Consolidate and synthesize existing databases to eliminate the redundancy in conducting inventories and studies. This would concentrate limited funds and personnel in areas where data gaps occur, and increase efficiency in data collection and use. (See also Issues II and III.)

H. Consistent with Federal law, establish a task force made up of other federal agencies, state and local government agencies, environmental groups, and industry to evaluate and recommend improvements to environmental requirements. The task force could assess the effectiveness and justification of environmental requirements and the use of the standard stipulation format. This recommendation needs to be coordinated with DOE's "Domestic Natural Gas and Oil Initiative" and the IOGCC Public Lands Project.

I. Establish partnerships with stakeholders to resolve environmental disputes. This recommendation needs to coordinated with the "Domestic Natural Gas and Oil Initiative" and Pubic Lands Project. (See also Issue I.)

J. Review existing interagency MOUs to improve coordination prior to decisions or commitments of resources. (See also Issue III.)

K. Instruct field offices to ensure that all planning documents spell out specifically where and when stipulations apply. If certain stipulations do not apply to the operational phase of a project, explain when and how those environmental requirements will be developed. For example, COAs pertaining to the operational phase will be developed during the APD process.

L. The Washington Office Fluids Division, in consultation with the DOI Solicitor, needs to issue a policy concerning the application of additional restrictions to leases sold prior to the Federal Land Policy and Management Act (FLPMA) or to leases that do not contain up-to-date stipulations. This would respond to the concerns that existing lease rights need to be protected but development requirements on pre-FLPMA leases and other leases may need to be modified to meet current environmental concerns.

## ISSUE V: TRAINING, SKILL MIX, AND STAFFING

There is widespread concern that a lack of field office personnel training, inappropriate skill mixes, and shortage of staff adversely impacts the quality of decision-making and management of oil and gas activities.

Staffing and Skill Mix:

- Insufficient staff levels due to heavy workloads adversely affect the quality of NEPA analysis and documentation and the extent to which compliance is accomplished post-lease.
- Comments concerning shortage of personnel and heavy workload were generally related to areas of heavy existing oil and gas activity. Therefore, the importance of the staffing component of this issue may vary significantly by location.
- In some cases, policies and procedures exist that employees are either unfamiliar with or that they do not accept. This causes an adverse impact on the oil and gas and other programs.

- Limited resources available to accomplish leasing analyses should focus in areas with high likelihood of leasing and development (moderate and high potential/interest areas).

- One commenter speculated that oil and gas price expectations will require additional BLM staffing to cope with large scale exploration and development of leases.

Training and Management Oversight:

- Inadequate budget and staff levels exist for environmental compliance and that cross-training of personnel may lead to more efficient and effective use of limited human resources. There was also concern that inappropriate skills were being utilized in analysis of oil and gas pre- and post-lease decisions (i.e., over-emphasis on mineral specialist input at the expense of biological, cultural and other perspectives and vice versa.)

- Management does not adequately support field personnel findings and recommendations. (See also Issue I.)

## RECOMMENDATIONS

A. Implement the following actions to improve efficiency and effectiveness through increased cross-training (both interdisciplinary and within the oil and gas program area) and improved interagency training and operational coordination:

1. Charter the BLM National Training Center as a focal point for interagency training coordination and delivery using an interagency Board of Regents to establish priorities and provide overall guidance.

2. Develop a training action plan that recognizes the importance of making all disciplines aware of oil and gas program processes and technology. Increased awareness and versatility among specialists will provide more flexibility to effectively utilize limited resources.

3. Establish a basic level of awareness training for non-mineral resource personnel to provide a fundamental understanding of processes and operational aspects of the oil and gas program. Develop an "outreach" component of this training for non-Bureau personnel, interested publics, and interest groups.

4. Provide interdisciplinary and planning team personnel as well as others involved in planning, leasing and permitting, with on-the-job training in field monitoring and compliance management to increase awareness of the

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RECOMMENDATIONS

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4. Provide interdisciplinary and planning team personnel as well as others involved in planning, leasing and permitting, with on-the-job training in field monitoring and compliance management to increase awareness of the

operational implications of project plans, lease stipulations and conditions of approval.

5. Establish a comprehensive, government-wide fluid mineral training program to include tribal, state, and federal personnel in cooperation with industry. (Potential examples are: Pipeline Systems Short Course, USFS Oil and Gas Specialist Certification Program, and BLM Inspector Certification Program.)

6. Include management/leadership training as an important component of the core curriculum to emphasize the need for management/staff interaction in on-the-ground program management. Without interactive managerial support, this recommendation's value will be significantly compromised.

7. Implement a BLM/FS program on training and mentoring patterned after EPA's Senior Environmental Employee program.

B. Develop and implement coordinated permit processing, compliance monitoring and enforcement, and data collection both within BLM and across federal and state jurisdictional boundaries.

1. California BPR Lab results may be instructive with regard to federal-federal and federal-state coordination and collaboration. Develop a comprehensive technology transfer program to implement positive results achieved by the California Lab. (See Recommendation C below.)

2. BLM should become an active, collaborative partner in Action Items 6.1, 6.2, 6.3, and 6.4 of DOE's "Domestic Natural Gas and Oil Initiative." Participation in these activities will facilitate BLM streamlining procedures and regulations in collaboration with other agencies and partners.

C. Initiate and maintain a comprehensive technology and information transfer program with an active "outreach component."

1. Collaborate with DOE and the Independent Petroleum Association of America (IPAA) to utilize their Technology Transfer Centers to function as an "extension service" with industry to enhance environmental compliance.

2. Establish, in consultation with academia and other agencies, a proactive technology transfer program to disseminate information from Performance Review Labs, Case Studies and Demonstration Projects, research and development, and other empirical "success stories" in resource management. (Possible sources of assistance include the University of

operational implications of project plans, lease stipulations and conditions of approval.

5. Establish a comprehensive, government-wide fluid mineral training program to include tribal, state, and federal personnel in cooperation with industry. (Potential examples are: Pipeline Systems Short Course, USFS Oil and Gas Specialist Certification Program, and BLM Inspector Certification Program.)

6. Include management/leadership training as an important component of the core curriculum to emphasize the need for management/staff interaction in on-the-ground process management. Without interactive management support, this recommendation's value will be significantly compromised.

7. Implement a BLM/ES program on training and mentoring patterned after EPA's Senior Environmental Employee program.

8. Develop and implement coordinated permit processing, compliance monitoring and enforcement, and data collection both within BLM and across federal and state jurisdictional boundaries.

I. California BPR Lab results may be instructive with regard to federal-federal and federal-state coordination and collaboration. Develop a comprehensive technology transfer program to implement positive results achieved by the California Lab. (See Recommendation C below.)

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1. Collaborate with DOE and the Independent Petroleum Association of America (IPAA) to utilize their Technology Transfer Center to function as an "extension service" with industry to enhance environmental compliance.

2. Establish, in consultation with academia and other agencies, a proactive technology transfer program to disseminate information from Performance Review Labs, Case Studies and Demonstration Projects, research and development, and other empirical "success stories" in resource management. (Possible sources of assistance include the University of

Wyoming Technology Transfer Center and Cornell University Center for the Environment.)

D. Increase emphasis on end-result regulation and implement an approach to fluid mineral and related realty use authorizations that is based on detailed project plans of development rather than conditions of approval. (This recommendation relates to Action Item 6.3 of the DOE "Domestic Natural Gas and Oil Initiative" cited above.) (See also Issue II.)

1. Establishing a consistent requirement for project plans of development places increased responsibility on project proponents to deal with environmental concerns and will result in project proposals better designed to meet ecological goals. This would reduce the need for BLM to react to sketchy or incomplete plans (usually shoring them up with a litany of conditions of approval).

2. A plan-based approach would facilitate placing the responsibility for environmental compliance on the project proponent. This would free up BLM resources to focus on environmental monitoring, NEPA documentation, and improved decision-making activities through consensus-building techniques. In addition, this marked move away from traditional "command and control" regulation provides a foundation for the Bureau to focus on ecological goals rather than technical issues best left to project proponents. (See also Issue IV.)

3. This recommendation also provides the added benefit of promoting an approach where industry, which is better equipped to do so, would staff up and down in response to fluctuating activity and large projects rather than agencies having to do so.

4. A case study example of the success of this recommendation is the Exxon LaBarge Project Quality Assurance/Quality Control (QA/QC) program in Southwest Wyoming.

E. Continue emphasis on aggressively placing all oversight personnel into field positions where oversight and quality control are performed on-the-ground rather than from afar. Eliminate review levels and replace with on-the-ground "review by doing" to achieve quality control.

1. Revise grade structure to recognize the need for senior expertise on the "front line" where actual operations are taking place. Higher graded field level positions would facilitate the assignment of experienced specialists to field offices where they could act to ensure top quality program operations and management, remain current on activities, technology and trends, and provide operational input to policy development and revision.

2. Focus initial implementation of this recommendation in areas with high levels of current and anticipated activity (e.g., Four Corners, Southwest Wyoming, Southern California.)

F. Establish criteria for prioritizing geographic areas for planning/NEPA decision-making relating to fluid mineral leasing and operations. Base the application of limited resources on such factors as drainage, mineral potential, industry nomination, and environmental factors. In plain terms, BLM should take an "asset management" approach to oil and gas management in the context of ecosystems.

G. Allocate resources to support strategic planning and trend analysis to anticipate upturns and downswings on local, regional and national levels. This can best be accomplished in collaboration with other agencies such as DOE and USFS, and with industry. Collaborative national energy planning would improve the federal government's ability to deal with fluctuating workloads associated with oil and gas operations and result in better decisions on allocation of research and development funds.

# SECTION TWO: ACTION PLANS

## ACTION PLAN 1: ESTABLISH AND MAINTAIN A COMMON RESOURCE DATABASE

Establish priorities, policies and protocols leading to a coordinated, comprehensive and dynamic resource database supporting resource management decision-making based on ecological systems. This task would be expensive and would require major priority shifts among BLM programs. The Action Plan is also designed to avoid repetitive data gathering, subjective decision-making and plan obsolescence.

This Action Plan includes Recommendations II.E, III.A, IV.B, IV.G and V.B.

What Needs To Be Done:

1. Carry out internal scoping studies to determine specific needs for resource data Bureauwide. This could best be accomplished using pilot project experience from areas such as Farmington District, the Pacific Northwest, the Bakersfield Lab and the Southwest Wyoming Resource Evaluation Project.

2. At the Headquarters level, initiate dialogue with all appropriate federal agencies on nationwide data-sharing. This task may best be coordinated by the National Biological Service and U.S. Geological Survey. Protocols should be developed for "no cost" data-sharing on a broad scale. Agencies such as EPA, U.S. Fish and Wildlife Service, National Park Service, DOE, and Forest Service should all be included in this effort. Standard procurement guidelines for hardware and software may significantly aid in common, compatible database establishment and maintenance.

3. Place funding and operational priority on database establishment even if this requires a "furlough" on further resource management planning to free up dollars and human resources to establish the necessary databases.

   Specific strategies need to be developed to consolidate and synthesize existing databases, eliminate redundant studies and concentrate limited resources (funding and personnel) in areas where the most critical data gaps exist.

4. Establish monitoring and other data gathering guidance that emphasizes the need to capture data in a manner compatible with and conducive to maintenance of an up-to-date database.

5. Develop a comprehensive outreach program to work with state and local governments to establish and maintain mutually beneficial resource databases.

## ACTION PLAN 2: STUDIES AND ANALYSES

The BPR team identified several studies that will provide information to improve the onshore minerals program and provide better customer service to both industry and other publics. Some of these studies should be conducted by BLM, while others are being administered by other agencies. BLM needs to coordinate with these agencies and disseminate their findings to Bureau staff nationwide.

What Needs to Be Done:

Analyze the magnitude of environmental controversies and their relationship to on-the-ground oil and gas potential and other resource values. (Recommendation I.F)

1. Study the effectiveness of mitigating measures:

   A. Establish a task force to study the types of stipulations and COAs that BLM/USFS uses in various situations, their true versus apparent purpose, and real effectiveness. (Recommendation IV.A) Coordinate this effort with the DOE Domestic Natural Gas and Oil Initiative and the IOGCC Public Lands Project. (Recommendation IV.I)

   B. Establish test areas to evaluate the proper use of mitigation measures during exploration. (Recommendation IV.C)

   C. Evaluate how often "No Lease" or NSO restrictions are used to create buffer zones around parks, wilderness areas, and other sensitive areas and determine if policy change is needed. (Recommendation IV.F)

2. Analyze the adequacy of RMPs (or Ecosystem Area Plans), including their timing, level (Eas versus EISs), efficiency, and cost. (Recommendation II.F)

   A. Design a Model Plan, based on ecosystems, to help streamline the planning process. (Recommendation II.G)

   B. Use information gained through monitoring to test the effectiveness of the plan and create a dynamic planning process.

3. Review existing MOUs to determine their effectiveness in assessing impacts based on ecosystem. (Recommendation III.C)

4. Establish a screening process to focus resources in areas with a moderate-to-high likelihood of leasing and development. (Recommendation I.E)

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3. Analyze the adequacy of RMPs (or Ecosystem Area Plans), including their timing, level (Geo versus EIS), efficiency, and cost. (Recommendation II.F)

   A. Design a Model Plan, based on ecosystems, to help/streamline the planning process. (Recommendation II.G)

   B. Use information gained through monitoring to test the effectiveness of the plan and create a dynamic planning process.

4. Review existing MOUs to determine their effectiveness in assessing impacts based on ecosystem. (Recommendation III.C)

5. Establish a screening process to focus resources in areas with a moderate-to-high likelihood of leasing and development. (Recommendation I.E)

5. Coordination with other entities and initiatives.

   A. Consistent with Federal law, establish partnerships with external groups to resolve environmental problems; collaborate with other agencies, industry, and academia; and coordinate with the numerous national and regional initiatives currently underway including BLM BPR, DOE Domestic Natural Gas and Oil Initiative, IOGCC Public Lands Project, CEQ Cumulative Effects Study, and USGS National Assessment. (Recommendations III.E and IV.J)

   B. Compile and distribute information and technology developed through these initiatives vertically and horizontally throughout the agency.

   C. Initiate and maintain a comprehensive technology and information transfer program with an active "outreach component." (Recommendation V.C)

6. In collaboration with other agencies and industry, allocate resources to strategic planning and trend analysis to anticipate upturns and downswings to improve government's ability to deal with fluctuating workloads. (Recommendation V.G)

## ACTION PLAN 3: BUREAU-WIDE POLICY REVIEW AND GUIDANCE

1. BLM should encourage public input and stakeholder involvement to promote the collaborative resolution of multiple use conflicts. Consistent with federal law, public input and stakeholder involvement should be elicited for the formation of the Bureau's leasing philosophy, development of land use plans, and consideration of waivers. (Includes recommendations I.B, II.D, II.K, III.C, and IV.D on dispute resolution, public participation in the stipulation waiver process and interagency coordination.)

2. BLM should strengthen its ecosystem management approach by increasing the flexibility of the planning process and focusing limited analytical resources on areas of greatest need. (Includes recommendations II.B, III.B, III.D, IV.J, and V.B on using plans based on ecosystems, assessing the quality of ecosystem management guidance, providing a consistent approach to ecosystem management, and improving interagency coordination.)

3. BLM should adopt a comprehensive approach to evaluating development proposals that reflects the actual effects (both positive and negative) of various oil and gas activities in the context of their ecological setting. (Includes recommendations II.H and II.I.)

4. BLM should reconsider how leasing decisions are made to ensure the balanced consideration of various resources and multiple uses. (Includes recommendation

I.C that would clarify field managers' discretion under FLPMA section 204 and the Mineral Leasing Act.)

5. BLM should review its land use plan development and implementation guidance to ensure that applicable guidelines are relevant and implemented by field personnel. (Includes recommendations I.D, II.A, II.C, IV.B, IV.E, IV.K, and V.D. on establishing a quality control program, field level use of appropriate guidance, justifying every lease stipulation, improving the quality of post-lease monitoring, expanding the number of elements analyzed in NEPA and planning documents, specifying in plans where and when stipulations and COAs apply, emphasizing end-result regulation over management prescriptions, and requiring project plans of development from project proponents.)

6. BLM should review its planning resource allocations to efficiently accomplish its oil and gas leasing mission. (Includes recommendations V.C, V.E, and V.F on enhancing technology transfer, improving oversight, and prioritizing the use of limited NEPA/planning resources based on mineral potential, environmental factors and other considerations.)

7. BLM should re-examine the definition of valid existing rights for pre-FLPMA leases and leases that do not contain up-to-date stipulations. (Includes recommendation IV.L regarding leases that do not have up-to-date stipulations.)

## Action Plan 4: Southwest Wyoming Resource Evaluation

This Action Plan incorporates BPR NEPA/Oil and Gas recommendations applicable to the SW Wyoming evaluation (or to other pilot projects such as the Bakersfield project). Applying these recommendations to ongoing projects such as the Southwest Wyoming Resource Evaluation and the Bakersfield Lab will allow development and testing under actual conditions. This Action Plan includes the following recommendations:

1. Improve public input into the Southwest Wyoming project or other pilot project to ensure a collaborative approach to the analysis and evaluation. (Includes recommendations I.B, II.K, IV.C, and IV.H on using dispute resolution mechanisms (consistent with federal law), and establishing test areas to evaluate effectiveness of mitigation measures.)

2. Develop criteria for stipulation development, proper justification of stipulations and ensure full compliance with NEPA and the CEQ regulations. (Includes recommendations I.C, I.D, and II.C on clarifying management discretion under FLPMA section 204 and the Mineral Leasing Act, establishing a quality control program for justifying stipulations, and improving public input in the stipulation waiver process.)

3. Improve cumulative impacts analyses and incorporate a comprehensive approach to the cumulative analysis and reasonable foreseeable development scenarios developed for planning and environmental projects. (Includes recommendations II.A, II.H, II.I, and III.F on using existing cumulative impact assessment guidance, adopting a comprehensive policy for evaluating proposals, establishing guidance for RFD scenarios that includes that policy, and developing a demonstration project which incorporates the BPR recommendations.)

4. Develop analysis areas based upon ecosystem management principles and that data collection and synthesis be done also on an ecosystem basis through cooperation and collaboration with other federal agencies, state and local government, and private and corporate entities. (Includes recommendations II.E, III.A, and IV.G on improving resource databases.)

5. Improve and increase field-level monitoring to determine the effectiveness of planning decisions and stipulations and the effectiveness of mitigation developed during the NEPA process. (Includes recommendations II.J and IV.A on emphasizing monitoring as a critical part of plan implementation and assessing the effectiveness of stipulations and V.B on coordinated monitoring and compliance.)

## ACTION PLAN 5: TRAINING AND STAFF EFFICIENCY

Implementation of the following related actions will improve efficiency and effectiveness through increased interagency cross-training (both interdisciplinary and within the oil and gas program area) and improved use of limited staff resources. Recommendations contained within this Action Plan are V.A.1-7.

What Needs to Be Done:

1. Charter the BLM National Training Center (NTC) as a focal point for interagency training coordination and delivery using an interagency Board of Regents to establish priorities and provide overall guidance.

   The NTC, under the oversight of the Board of Regents, should carry out the following actions:

   A. Develop a training action plan that recognizes the importance of making all disciplines aware of the oil and gas program processes and technology and vice versa. The plan should provide increased technical training for field specialists. This comprehensive plan should also provide increased awareness and versatility among specialists and improve BLM's flexibility to effectively utilize limited resources.

B. The Action Plan should include, at a minimum, the following components, and be designed for delivery for on-site team training, rather than at NTC or other central location:

- A basic level of awareness training for non-mineral personnel to provide a fundamental understanding of processes and operational aspects of oil and gas resources and the industry. This training should include an outreach component for non-BLM personnel, interested publics and interest groups.

- A comprehensive, government-wide fluid mineral training program to include tribal, state agency, and federal personnel, in cooperation with industry. (Potential courses include: Pipeline Systems Short Course, U.S. Forest Service Oil and Gas Specialist Certification Program, and BLM Inspector Certification Program.)

- The Management and Leadership component of the core curriculum should emphasize the need for management/staff interaction in program and project on-the-ground management. Without interactive managerial support, the Action Plan's overall value will be significantly compromised.

2. The Executive Leadership Team should take the following actions to complement the comprehensive training program outlined above:

A. Implement a BLM/Forest Service program on training and mentoring. (An example is the EPA's Senior Environmental Employee program.)

B. Provide interdisciplinary and planning team personnel, as well as others involved in planning, leasing, and permitting, with on-the-job training in field monitoring and compliance management to increase the operational implications of project design, plan of development review, lease stipulations, and conditions of approval. This can be best accomplished at the State Office and field levels, but requires top management's support to be successful.

B. The Action Plan should include, at a minimum, the following components, and be designed for delivery for on-site team training, rather than at NTC or other central location:

- A basic level of awareness training for non-mineral personnel to provide a fundamental understanding of processes and operational aspects of oil and gas resources and the industry. This training should include an outreach component for non-BLM personnel, interested publics and interest groups.

- A comprehensive, government-wide fluid mineral training program to include tribal, state agency, and federal personnel, in cooperation with industry. (Potential courses include: Pipeline Systems Short Course, U.S. Forest Service Oil and Gas Specialist Certification Program, and BLM Inspector Certification Program.)

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## APPENDIX A
### TEAM MEMBERS

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